

**APPENDIX A**

RPID=1105489063-30856-30166294485.BLASTQ4,

<http://www.ncbi.nlm.nih.gov/BLAST/Blast.cgi>

>gi|31795107|gb|AC005383.2| Homo sapiens chromosome 10 clone CIT967SK-1144G6 map 10q25.1, complete sequence  
length = 121774

Score = 1405 bits (709), Expect = 0.0  
Identities = 747/753 (99%), Gaps = 5/753 (0%)  
strand = Plus / Plus

Query: 2614 ggatcccttggatcgcccgatggccatgtggatccatgcaggaggcgccgcggatcccc 2673  
Subject: 78153 ggatcccttggatcgcccgatggccatgtggatccatgcaggaggcgccgcggatcccc 78212

Query: 2674 cccccccagccaaactacccggggaaaggccctggggcaccqaatccatggctacccttcggggatggcc 2733  
Sbjct: 78211 ccccccccccggccatccggggaaaggccctggggcaccqaatccatggctacccttcggggatggcc 78272

Query: 2734 stggccccagggtcccttagaatgtgtgtttccgcggcggccaggaccactatcttcactga 2793  
Subject: 27332 stggccccagggtcccttagaatgtgtgtttccgcggcggccaggaccactatcttcactga 78332

Query: 2054 CCCACGAAAGCGATGCGTGTGAAAGGCTTCGATGCT-  
Subject: 20549 CGGCGGAAAGCGATGCGTGTGAAAGGCTTCGATGCT- 7845

Query: 3994 gcccacggcctttcaagatggaaagcagcagttttccacttcccccnagagatccggat 3153

Query: 3154 scatttcactgagccctgaaaggggggcttggggacgttttgtactttttggcgtaccggcc 3213

Subject: 78871 aaaaatcgccccggcgcgcgagcagcgccccccc 78803

Score = 1140 bits (575), Expect = 0.0

RJD=1105489063-30856-30166294485.BLASTQ4,

<http://www.ncbi.nlm.nih.gov/BLAST/Blast.cgi>

Subjct: 72934 ggcaccaactctgggacggttctcgggggccaaaglcttcgtgaaaggcggttcgtgcggggcc 72933

Query: 1444 gtgcgtggcgaggactctggggcccgaggcggtgtggccacatcacagcaggggggctctg 1503  
Sbjct: 72994 gtgcgtggcgaggactctggggcccgaggcggtgtggccacatcacagcaggggggctctg 73053

Query: 1504 gtggccgtgcctgtggggggatgtaccaggatgtgcctgatggccctggatgc 1563  
Sbjct: 73054 gtggccgtgcctgtggggggatgtaccaggatgtgcctgatggccctggatgc 73113

Query: 1564 atccccctccgtggcccccacccgtacggggcgtgcggccctggcgccggcaggccggcagagggt 1623  
Subject: 73114 atccccctccgtggcccccacccgtacggggcgtgcggccctggcgccggcaggccggcagagggt 73173

Query: 1624 ggctttcgggggcgccaccaggagacaggccaggggccaaatgtatgtttttgttc 1683  
Sbjct: 73174 ggctttcgggggcgccaccaggagacaggccaggggccaaatgtatgtttttgttc 73233

Query: 1684 actggagtccacactccggaggatcgagggttggggggcccaagggcgtaacgcacaaaggggccgggggg 1743  
Sbjct: 73234 actggagtccacactccggaggatcgagggttggggggcccaagggcgtaacgcacaaaggggccgggggg 73293

Query: 1804 agccccaaagcatgtgtatggttactcggatcttggatctgttcacccaaatccccgtgg 1863  
Sbjct: 73354 agccccaaagcatgtgtatggttactcggatcttggatctgttcacccaaatccccgtgg 73411

Query: 1864 ctcacaggaaaggccgtgcagccggcagccggcagg 1898  
Sbjct: 73414 cccgcaggaaaggccgtgcagccggcagccggcagg 73448

Score = 1076 bits (543). Expect = 0.0  
Identities = 553/555 (99%). Gaps = 1/555 (0%)  
Strand = Plus / Plus

Query: 1895 cagggttgcggacacaaggccctggaccttcgttggacacccttcgttcgtac 1994  
Sbjct: 75871 cagggttgcggacacaaggccctggaccttcgttggacacccttcgttcgtac 75830

Query: 1955 ggccccggaaattttgtctcagatgcggagggcttgtggaaaggatgtggccctccaaatgggg 2014  
Sbjct: 75931 ggccccggaaattttgtctcagatgcggagggcttgtggaaaggatgtggccctccaaatgggg 75990

Query: 2015 tgaaaccttgaaaccttgaaacctggccgtgggtgtatggccggccgggtcagactgtcct 2074  
Sbjct: 75991 tgaaaccttgaaaccttgaaacctggccgtgggtgtatggccggccgggtcagactgtcct 76050

Query: 2075 tccgggtctggacccaaatccacccgggtctggatgtctggggggccatggggggggccctt 2134  
Sbjct. 76051 tccgggtctggacccaaatccacccgggtctggatgtctggggggccatggggggccctt 76110

Query: 2194 ccgttccaggggggtgcggccggccggctgtccccaaaggctgtggggggggctgcggccacacggccggaa 2233  
Subject: 76171 ccgttccaggggggtgcggccggccgtgtccccaaaggctgtggggggggctgcggccacacggccggaa 76230

Query: 2256 gaggccgacagggatgcagccgttcctgcggccagaatcgatggggaaactggatctctgtct 2313  
Sbjct: 76231 gaggccgacagggatgcagccgttcctgcggccagaatcgatggggaaactggatctctgtct 76290

RID=1105489063-30856-30166294485.BLASTQ4.

<http://www.ncbi.nlm.nih.gov/BLAST/Blast.cgi>

Subject: 76291 tggtcggggcggtggggccgttccaaatgtggggcttgcggagggttgcaggccccggg 76350

Query: 2374 atccccctgaacccacgtggcagttacgcggacccgtggcggttaccacccaggacggctgtccatcg 2433  
Subject: 76351 atccccctgatccccacgtggcagttacgcggacccgtggcggttaccacccaggacggctgtccatcg 76410

Score = 526 bits (316), Expect = e-176  
Identitics = 316/316 (100%)  
Strand = Plus / Plus

Query: 2 acagtgttcgcggctgcacccgtcgaggctggggatgtgggtgcacccggatggatgtttt 61  
Subject: 26189 acagtgttcgcggctgcacccgtcgaggctggggatgtgggtgcacccggatggatgtttt 26218

Query: 62 tttatcttgcgacccgtggccgtatggccgtttaaaaacgcggggggcttctatgcaccc 121  
Sbjct: 26249 tttatcttgcgacccgtggccgtatggccgtttaaaaacgcggggggcttctatgcaccc 26308

Query: 122 ctggcggtgtttccctccgatctcagecggggtcggttcgtgtcccttcgggaga 181  
Subject: 26109 ctggcggtgtttccctccgatctcagecggggtcggttcgtgtcccttcgggaga 26388

Query: 182 caaacacgggtgtccacgtggcgacggcgccggcgccgtggatcccgttagcgc 2a1  
Sbjct: 26169 caaacacgggtgtccacgtggcgacggcgccggcgccgtggatcccgttagcgc 26428

Outbox: 242 ccccttgcccgagccggccgggtcgagccggccggccaccggagcgctgt 301  
Sbjct: 26429 ccccttgcccgagccggccgggtcgagccggccggccaccggagcgctgt 26488

Query: 302 cggccgtctcccttcgg 317  
Sbjct: 26489 cggccgtctcccttcgg 26504

Score = 391 bits (197), Expect = e-105  
Identitites = 197/197 (100%)  
Serand = Plus / Plus

Query: 699 aggaggggcgcacggggacccggatgtcgatgtggatcccttcgcacaggggttgctgg 758  
Sbjct: 59676 aggaggggcgcacggggacccggatgtcgatgtggatcccttcgcacaggggttgctgg 59735

Query: 759 aggcagaatgttttgtggcccatcatcatgtactgtggaaagtcccgagg 818  
Subject: 59736 aggcagaatgttttgtggcccatcatcatgtactgtggaaagtcccgagg 59795

Query: 8199 ggatcggtgcactgcattccaaaggcgtggaaaggaaagggtgtcaactgtgttttgtgtggg 878  
Sbjct: 59796 ggatcggtgcactgcattccaaaggcgtggaaaggaaagggtgtcaactgtgttttgtgtggg 59855

Query: 879 ggttcagggtccccccagg 895  
[||||| ]||||| ||||| |||||  
Sbjct: 59856 ggttcagggtccccccagg 59872

Score = 335 bits (169). Expect = 4e-88  
Identities = 169/169 (100%)  
Strand = Plus / Plus

RID=1105489063-30856-30166294485.BLASTQ4,

<http://www.ncbi.nlm.nih.gov/BLAST/Blast.cgi>

Query: 2417 agaagccaaaggccaggccaaaccctgtcaaaaccctgtccgtatgtaaatggggcagctg 2506  
Sbjct: 77174 agaagccaaaggccaggccaggccaaaccctgtcaaaaccctgtccgtatgtaaatggggcagctg 77232

Query: 2507 cgtctctggcagaatggggagctaccgtgcagaatgtcgggatggctggggggggggccccactg 2566  
Sbjct: 77234 cgtctctggcagaatggggagctaccgtgcagaatgtcgggatggctggggggggggccccactg 77293

Query: 2567 cgagaaaccgtggaggctccgtctgtatgtgtggccagggtgg 2615  
Sbjct: 77294 cgagaaaccgtggaggctccgtctgtatgtgtggccagggtgg 77342

Score = 272 bits (137), Expect = 5e-69  
Identities = 137/137 (100%)  
Strand = Plus / Plus

Query: 951 tgaggcagggtgggggggttcggccatccacccaaacggccgttttcggccatccatcgcaatcgccatctg 1010  
Subject: 64907 tggcccaagggtggggggatccggccatccacccaaacggccgttttcggccatccatcgcaatcgccatctg 61966

Query: 2011 ctcccaaggccacggccag 1027  
Sbjct: 64967 ctcccaaggccacggccag 64983

Score = 270 bits (136), Expect = 2e-68  
Identities = 136/136 (100%)  
Strand = Plus / Plus

Query: 10285 cagaactcgagggtcgagggtcacccctgtggcacaggacgtcgagatggctccggggatc 1084  
Sbjct: 65652 cagaactcgagggtcgagggtcacccctgtggcacaggacgtcgagatggctccggggatc 6571

Query: 1085 tcgtctggccatgtccccatgtggagagggatcgccggccggcccttgcgggtgtcgatgcac 1144  
Sbjct: 65712 tcgtctggccatgtccccatgtggagagggatcgccggccggcccttgcgggtgtcgatgcac 65771

Query: 1145 actgtggcccccacag 1150  
1|||||||||||||||  
Sbjct: 65772 actgtcccttttacag 65787

Score - 270 bits (136), Expect - 2e-68  
Identities - 136/136 (100%)  
Strand - Plus / Plus

Query: 455 tgatgtggcgcctggcgtcgactgggacatcatgttttgcgttagatgggtcttacacgcgtcg 514  
Subject: 41851 tgatgtggcgcctggcgtcgactgggacatcatgttttgcgttagatgggtcttacacgcgtcg 41910

Query: 515 ggaaaaaggggactttggccaaaggccatcttggccatccatggatctggccatccggaa 574  
Sbjct: 41911 ggaaaaaggggactttggccaaaggccatcttggccatccatggatctggccatccggaa 41970

Query: 575 tcggccccggaggggt 590  
||| ||| ||| ||| |||  
Sbjct: 41971 tcggccccggaggggt 41986

R1D=1105489063-30856-30166294485.BLASTQ4,

<http://www.ncbi.nlm.nih.gov/BLAST/Blast.cgi>

Score = 220 bits (111). Expect = 26.53  
Identities = 111/111 (100%)  
Second = Plus / Plus

Query: 588 ggtccagactggggacatcccgatctcgatccactcttcatctggaaatcccccctggatcc 647  
|||||||  
Subject: 4812210ggccagactggggacatcccgatctcgatccactcttcatctggaaatcccccctggatcc 48180

Query: 648 atttttcAAcccaacaggaaatgtggcaaggcaagaatcgttttttcaa 698  
Subject: 48781 atttttcAAcccaacaggaaatgtggcaaggcaagaatcgttttttcaa 48231

Score = 218 bits (110), Expect = 7e-53  
Identities = 110/110 (100%)  
Strand = Plus / Plus

Query: 1215 agggccctgtgactcgcagccctgcgcagaatggggcacaatgtgttccagggaggactgg 1274  
Subject: 71797 agggccctgtgactcgcagccctgcgcagaatggggcacaatgtgttccagggaggactgg 71856

Score = 153 bits (77), Expect = 3e-33  
Identities = 77/77 (100%)  
Strand = Plus / Plus

Query: 379 agtgcggcccatcttcctccatcgaaatgtccatgtcaaggaaaccatcgggaaatg 437  
Sbjct: 40585 agtgcggcccatcttcctccatcgaaatgtccatgtcaaggaaaccatcgggaaatg 40644

Query: 438 cccagctgccagcaaaa 454  
||| ||| ||||| |||||  
Sbjct: 40645 tccagctgccagcaaaa 40651

Score = 117 bits (59), Expect = 2e-22  
Identities = 59/59 (100%)  
Strand = Plus / Plus

Query: 1159 agctggaaagagactgtcccccaaacccacccgtgcacactgtgtacaggaccacccgtggccagg 1217  
Sbjct: 69450 agctggaaagagactgtcccccaaacccacccgtgcacactgtgtacaggaccacccgtggccagg 69508

Score = 117 bits (59). Expect = 2e-22  
Identities = 62/63 (98%)  
Strand = Plus / Plus

Query: 317 gttatataccatgcggccctttcccgctgtctggaggcggtctgtgtttctctgtttccca 376  
Subject: 35698 gttatataccatgcggccctttcccgctgtctggaggcggtctgtgtttctctgtttccca 35698

Query: 377 gag 379  
|||  
Subject: 35699 gag 35701